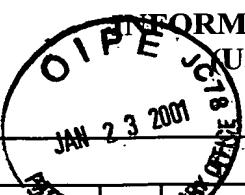


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<b>U.S. PATENT DOCUMENTS</b>										
Examiner Initials	Document Number	Date		Name		Class	Subclass	Filing Date if Appropriate		
	US 5 0 2 1 4 0 9	6/4/91		Murrer, et al.						
	US 5 1 2 6 4 3 3	6/30/92		Maddon, et al.						
	US 5 4 4 0 0 2 1	8/5/95		Chuntharapai, et al.						
▼	US 5 5 0 4 0 0 3	4/2/96		Li, et al.						
<b>FOREIGN PATENT DOCUMENTS</b>										
	Document Number	Date		Country		Class	Subclass	Translation		
								Yes	No	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>										
	Alkhatib, G., et al., (1996), CC CKR5: A RANTES, MIP-1 $\alpha$ , MIP-1 $\beta$ Receptor As A Fusion Cofactor For Macrophage-tropic HIV-1, <u>Science</u> 272: 1955-1958;									
		Alkhatib et al., (1997), HIV-1 Coreceptor Activity Of CCR5 And Its Inhibition By Chemokines: Independence From G Protein Signaling And Importance Of Coreceptor Downmodulation, <u>Virology</u> 234: 340-348 (Exhibit 1);								
		Arenzana-Selsdedos, F., et al., (1996), HIV Blocked By Chemokine Antagonist, <u>Nature</u> 383: 400;								
		Berger et al., (1999), Chemokine Receptors As HIV-1 Coreceptors: Roles In Viral Entry, Tropism, And Disease, <u>Ann. Rev. Immunol.</u> 17: 657-700 (Exhibit 2);								
EXAMINER			DATE CONSIDERED 09/26/01							
<small>*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>										

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**Applicants: Graham P. Allaway, et al.  
Serial No: 09/460,216  
Filed: December 13, 1999**

## Exhibit A

Form PTO-1449 <i>1 P E J C JAN 23 2001 U.S. PATENT AND TRADEMARK OFFICE</i>	U.S. Department of Commerce Patent and Trademark Office	Atty. Docket No. 50875-F-PCT-US/JPW/ SHS/MVM	Serial No. 09/460,216
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## U.S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENT							
	Document Number	Date	Country	Class	Subclass	Translation	
						Yes	No

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

Y	Bleul, C.C., et al., (1996), The Lymphocyte Chemoattractant SDF-1 Is A Ligand For LESTR/Fusion And Blocks HIV-1 Entry, <u>Nature</u> 382: 829-832;
	Brenner, T.J., et al., (1991), Relation Between HIV-1 Syncytium Inhibition Antibodies And Clinical Outcome In Children, <u>The Lancet</u> 337: 1001-1003;
	Choe, H., et al., (1996), The $\beta$ -chemokine Receptors CCR3 And CCR5 Facilitate Infection By Primary HIV-1 Isolates, <u>Cell</u> 85: 1135-1148;
↓	Cocchi, F., et al., (1995), Identification Of RANTES, MIP-1 $\alpha$ , And MIP-1 $\beta$ As The Major HIV-suppressive Factors Produced By CD8 $^{+}$ T Cells, <u>Science</u> 270: 1811-1815;

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<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>							
✓	Deng et al., (1996), Identification Of A Major Co-receptor For Primary Isolates Of HIV-1, <u>Nature</u> 381: 661-666;						
	✓	Doranz et al., (1996), A Dual-Tropic Primary HIV-1 Isolate That Uses Fusin And The $\beta$ -Chemokine Receptors CKR-5, CKR-3, and CKR-2b As Fusin Cofactors, <u>Cell</u> 85: 1149-1158 (Exhibit 4);					
✓		Doranz et al., (1997), A Small-Molecule Inhibitor Directed Against The Chemokine Receptor CXCR4 Prevents Its Use As An HIV-1 Coreceptor, <u>J. Exp. Med.</u> 186(8): 1395-1400 (Exhibit 5);					
	✓	Dragic, T., et al., (1996), HIV-1 Entry Into CD4+ Cells Is Mediated By The Chemokine Receptor CC-CKR-5, <u>Nature</u> 381: 667-673;					
EXAMINER		DATE CONSIDERED 09/26/01					

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## FOREIGN PATENT DOCUMENTS

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	Gong, J., et al., (1996), RANTES and MCP-3 Antagonists Bind Multiple Chemokine Receptors, <u>J.Biol.Chem.</u> 271:10521-10527;
	Hattori, T., et al., (1989), Involvement Of Tryptase-related Cellular Protease(s) In Human Immunodeficiency Virus Type 1 Infection, <u>FEBS Letters</u> 248: 48-52;
	Haynes et al., (1996), Update On The Issues Of HIV Vaccine Development, <u>Ann. Med.</u> 28: 39-41;
 	Jones, S.A., et al., (1997), Chemokine Antagonists That Discriminate Between Interleukin-8 Receptors, <u>J. Biol. Chem.</u> 272: 16166-16169;

**EXAMINER**

**DATE CONSIDERED**

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## FOREIGN PATENT DOCUMENTS

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

J	<p>Moser, B., et al., (1993), Interleukin-8 Antagonists Generated By N-terminal Modification, <i>J. Biol. Chem.</i> 268: 7125-7128;</p>
L	<p>Oberlin, E., et al., (1996), The CXC Chemokine SDF-1 Is The Ligand For LESTR/Fusion And Prevents Infection By T-cell-line-adapted HIV-1, <i>Nature</i> 382: 833-835;</p>
L	<p>Oellerich, M., (1984), Enzyme-Immunoassay: A Review, <i>J. Clin. Chem. Clin. Biochem.</i> 22(12): 895-904;</p>
R	<p>Raport, C.J., et al., (1996), New Members Of The Chemokine Receptor Gene Family, <i>J. Leuk. Biol.</i> 59: 18-23;</p>

**EXAMINER**

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**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

J	Samson, M., et al., (1996), Molecular Cloning And Functional Expression Of A New Human CC-chemokine Receptor Gene, <u>Biochemistry</u> 35: 3362-3367 ( <b>Exhibit 9</b> );
↓	Scarlatti et al., (1997), In Vivo Evolution Of HIV-1 Co-receptor Usage And Sensitivity To Chemokine-mediated Suppression, <u>Nature Medicine</u> 3(11): 1259-1265 ( <b>Exhibit 10</b> );
↓	Simmons, G., et al., (1997), Potent Inhibition Of HIV-1 Infectivity In Macrophages And Lymphocytes By A Novel CCR5 Antagonist, <u>Science</u> 276: 276-279;
▼	Szabo et al., (1992), CD4 Changes Conformation Upon Ligand Binding, <u>J.Immunol.</u> 149(11): 3596-3604 ( <b>Exhibit 11</b> );

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## FOREIGN PATENT DOCUMENTS

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

J Trkola, A., et al., (1996), CD4-dependent, Antibody-sensitive Interactions Between HIV-1 And Its Co-receptor CCR-5, Nature 384: 184-187;

J Wells, T., et al., (1996), Selectivity And Antagonism Of Chemokine Receptors, J. Leuk. Biol. 59: 53-60;

J Wu, L., et al., (1996), CD4-induced Interaction Of Primary HIV-1 gp120 Glycoproteins With The Chemokine Receptor CCR-5, Nature 384: 179-183;

Wu, L., et al., (1997), CCR5 Levels And Expression Pattern Correlate With Infectability By Macrophage-tropic HIV-1, In Vitro, J. Exp. Med. 185: 1681-1691; and

**EXAMINER**

**DATE CONSIDERED**

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